Molecular Analysis of Vibrio Cholerae El Torv Ariants Isolated from Outbreaks During 2005 in Iran by REP-PCR and ERIC-PCR

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Background & Objectives: In the present study, we analyzed the PCR patterns of *Vibrio cholerae* El Tor variants isolated from outbreaks during 2005 in Iran by REP-PCR and ERIC-PCR.

Methods: Thirty nine El Tor variants were obtained from outbreaks during 2005 in Iran. After detection of isolates by biochemical methods, and serotyping, chromosomal DNA was extracted by standard phenol/chloroform methods. REP-PCR was carried out using Rep 1R- I and Rep 2-I primers, also ERIC-PCR was done by using ERIC -1R and ERIC – 2. The PCR product was run and visualized in 1.5% agarose gels stained with ethidium bromide.

Results: Thirty nine El Tor variants were analyzed and PCR Product sizes by REP-PCR methods were between 250-3500 bp and 5 different PCR patterns were detected. The most common pattern by REP-PCR was observed among 26 (66.7%) isolates. By ERIC-PCR 7 different patterns were detected.

Conclusion: Results of this study showed that most of strains have similar pattern by REP-PCR and ERIC-PCR. It is assumed that these strains have the same origin.

Keywords: *Vibrio cholerae*; Molecular Typing, Iran